



Release Note for the Cisco Application Networking Manager

April 21, 2009



Note

The most current documentation for released products is available on cisco.com.

This release note applies to the following software versions for Cisco Application Networking Manager (ANM):

- 2.1
- 2.1(1)

This release note contains the following sections:

- [New Features and Support](#)
- [Supported Devices and Software](#)
- [ANM Product Documentation Set](#)
- [Installing the ANM 2.1 Software](#)
- [Installing the ANM 2.1\(x\) Software](#)
- [Using the New Advanced Settings Screen in ANM 2.1\(1\)](#)
- [Software Version ANM 2.1\(1\) Resolved Caveats and Open Caveats](#)
- [Software Version ANM 2.1 Resolved Caveats and Open Caveats](#)
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- [Obtaining Documentation and Submitting a Service Request](#)



Caution

The ANM 2.1(x) images do not support upgrading from beta or pre-FCS ANM versions. Upgrading from a beta or pre-FCS version may cause ANM to remove data when you install the ANM image. If any data loss occurs, you will need to re-import all devices and modules that you previously imported.



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New Features and Support

ANM 2.1 provides the following new features and enhanced hardware support as noted:

- Support for Catalyst 6500 Virtual Switching System (VSS) 1440, including the importing of VSS system and ACE modules residing in the VSS chassis. For additional information on VSS functionality and setup, go to:
<http://www.cisco.com/en/US/docs/switches/lan/catalyst6500/ios/12.2SX/configuration/guide/vss.html>
- Support for the Cisco 7600 Series Router Switch Processor 720 (RSP 720) module, the newest type of supervisor engine available for Cisco 7600 series routers.
- Miscellaneous usability enhancements.

ANM 2.1(1) provides the following new features as noted:

- Ability to overwrite ACE logging device-id while setting up Syslog for Autosync
- Ability to enable or disable write memory on a Config > Operations configuration

Supported Devices and Software

For information on Cisco devices supported by ANM 2.1(x), refer to the *Supported Devices Table for the Cisco Application Networking Manager 2.1* located at:

http://www.cisco.com/en/US/products/ps6904/products_device_support_tables_list.html

ANM Product Documentation Set

In addition to this release note, the Cisco Application Networking Manager (ANM) documentation set includes the following publications. You can access the ANM documentation on www.cisco.com at:

http://www.cisco.com/en/US/products/ps6904/tsd_products_support_series_home.html

- *Installation Guide for the Cisco Application Networking Manager 2.1*—Includes complete installation and configuration information for the ANM 2.1 software.
- *User Guide for the Cisco Application Networking Manager 2.1*—Includes complete information about ANM functionality and detailed procedures for its use. Contains all of the information found in online help. Available either on cisco.com or from the ANM online help.
- Context-sensitive online help—Help topics for all pages in the UI (also provides access to PDFs of the user guide). Select an option from the ANM GUI, then click **Help**.
- *Supported Devices Table for the Cisco Application Networking Manager 2.1*—Includes complete supported device and firmware versions for ANM.
- *Supplemental License Agreement for the Cisco Application Networking Manager*—Description of licensing limitations and restrictions.

Installing the ANM 2.1 Software

For complete instructions on how to install your ANM 2.1 software, see the *Installation Guide for the Cisco Application Networking Manager 2.1*. It provides step-by-step directions for installing and for upgrading the ANM 2.1 software.

Click the link below to access the *Installation Guide for Cisco Application Networking Manager 2.1*:

http://www.cisco.com/en/US/docs/app_ntwk_services/data_center_app_services/application_networking_manager/2.1/installation/guide/anm_ig.html

Installing the ANM 2.1(x) Software

This section outlines the tasks to install the ANM 2.1(x) software patch on an existing ANM 2.1 release. It includes the following topics:

- [ANM 2.1\(x\) Installation Prerequisites](#)
- [Backing Up the ANM 2.1 Software](#)
- [Installing the ANM 2.1\(x\) Software](#)

For additional background details on the ANM software installation process, see the *Installation Guide for Cisco Application Networking Manager 2.1*:

http://www.cisco.com/en/US/docs/app_ntwk_services/data_center_app_services/application_networking_manager/2.1/installation/guide/anm_ig.html

**Note**

Installing the ANM 2.1(1) software patch addresses the known issue identified in CSCsy79949, where you may find that SSL key pairs are missing from the Keys table in ANM software version 2.1. See [Software Version 2.1\(1\) Resolved Caveats, page 7](#), for background details on CSCsy79949.

ANM 2.1(x) Installation Prerequisites

You must first install the ANM 2.1 release as outlined in the *Installation Guide for the Cisco Application Networking Manager 2.1*. The ANM 2.1(x) software patch can be applied only on an existing ANM 2.1 installation.

Backing Up the ANM 2.1 Software

Performing a backup of the ANM 2.1 system is not a mandatory procedure. However, if you decide to back up the ANM 2.1 system before installing the ANM 2.1(x) software patch, perform the following steps:

1. From the Linux command line, log in as the root user.
2. As a root user, enter the `/opt/CSCOanm/bin/anm-tool backup ./anm-backup` command to create an ANM backup file. This command creates the `anm-backup` file in the current working directory.

Installing the ANM 2.1(x) Software

To install the ANM 2.1(x) software patch, perform the following steps:

1. Copy the `anm211.bin` to your target ANM 2.1 installation machine.
2. Apply the ANM 2.1(x) software patch by entering the following command as the root:

```
bash anm211.bin
```



Note It may take a couple of minutes for the ANM to automatically restart.

After you install the ANM 2.1(x) software patch, the ANM GUI will display the updated software version on the ANM Login window, the About page, and the ANM window header.

Using the New Advanced Settings Screen in ANM 2.1(1)

With the ANM 2.1(1) software release, the ANM GUI includes a new Advanced Settings screen under **Admin > ANM Management** that allows you to configure the following functions:

- Enable or disable overwrite of the ACE logging device-id while setting up syslog for autosync using **Config > Devices > Setup Syslog for Autosync**.
- Enable or disable write memory on a **Config > Operations** configuration.

This section includes the following topics on the use of the new Advanced Settings screen:

- [Configuring the Overwrite the ACE Logging device-id for the Syslog Option](#)
- [Configuring the Enable Write Mem on the Config > Operations Option](#)

Configuring the Overwrite the ACE Logging device-id for the Syslog Option

By default, ANM Autosync relies on the ACE logging device-id to be of type “String.” A device-id setting adds explicit information that is appended to the syslog message, and is used by ANM to uniquely identify the source of a syslog message. If you configure ANM to manage syslog settings for Autosync on a virtual context (**Config > Devices > Setup Syslog for Autosync**) and the logging device-id is defined as something other than type “String” for the context, the operation fails and ANM displays “Syslog device is already configured for other purpose.”

You can instruct ANM to overwrite the ACE logging device-id when you enable the synchronization of syslog messages setup of syslog for Autosync from the ACE. If any of the contexts that you are trying to set up a syslog the syslog for Autosync has a device-id setup for a type other than string, ANM will override the device-id with the ANM preferred string.

To overwrite the ACE logging device-id, perform the following procedure:

-
- Step 1** Choose **Admin > ANM Management > Advanced Settings**. The Advanced Settings configuration screen appears.
 - Step 2** In the Overwrite ACE Logging Device ID field, perform one of the following actions:
 - Click **Enable** to overwrite the logging device-id during Setup Syslog for Autosync.
 - Click **Disable** to prevent overwriting the existing logging device-id if it has been previously set up with a type other than string. If the selected context from Setup Syslog for Autosync already has a device-id that is setup with a type other than string, then the operation will report an appropriate error and ANM will not overwrite this setting. This is the default setting.
 - Step 3** Click **OK** to accept your entries on the Advanced Settings configuration screen.
-

Configuring the Enable Write Mem on the Config > Operations Option

By default, ANM initiates a **write memory** command action after you activate or suspend changes on the ACE, CSM, or CSS through the different ANM Operations Pages (**Config > Operations**). In certain situations, such as those that involve large configurations, a **write memory** action can take an extended period of time to complete. In this case, the ANM GUI may time out. If a **write memory** action is not performed before a device reload occurs, the changes will be lost. You can instruct ANM to enable or disable write memory on a Config > Operations configuration.

**Note**

The **write memory** command is the same as the **copy running-config startup-config** command; both commands save changes to the configuration.

**Note**

The CSS Expert mode must be disabled if you wish to disable the Write Mem on Config > Operations feature. The Expert mode allows you to turn the CSS confirmation capability on or off; turning Expert mode on disables the CSS from prompting for confirmation when configuration changes are made. If Expert mode is enabled on the CSS, this function will cause the CSS to perform an implicit write memory action after each operational change.

To configure the Enable Write Mem on Config > Operations feature, perform the following procedure:

-
- Step 1** Choose **Admin > ANM Management > Advanced Settings**. The Advanced Settings configuration screen appears.
- Step 2** In the Enable Write Mem on Config > Operations field, perform one of the following actions:
- Click **Enable** to instruct ANM to activate the write memory action on the Config > Operations screen. This is the default.
 - Click **Disable** to deactivate the write memory action on the Config > Operations screen. This option will require you to periodically access the CLI for the ACE context, the CSM, or the CSS and enter the **write memory** command to commit the change to the startup-configuration.
- Step 3** Click **OK** to accept your entries on the Advanced Settings configuration screen.
-

Software Version ANM 2.1(1) Resolved Caveats and Open Caveats

The following sections contain the resolved and open caveats in ANM software version 2.1(1):

- [Software Version 2.1\(1\) Resolved Caveats](#)
- [Software Version 2.1\(1\) Open Caveats](#)

Software Version 2.1(1) Resolved Caveats

[Table 1](#) lists the resolved caveats that apply to ANM software version 2.1(1).

Table 1 *Resolved Caveats in Software Version 2.1(1)*

Bug ID	Summary	Explanation
CSCsv00734	Can't set up syslog for auto sync when syslog device-id is already defined	<p>When you attempt to enable the synchronization of syslog messages from the ACE (Config > Devices > Setup Syslog for Autosync) for one or more contexts, the operation fails and ANM displays the following error message: "Syslog device is already configured for other purpose."</p> <p>This behavior can occur when one or more of the contexts contains a unique syslog device-id that is defined by using one of the following CLI commands:</p> <ul style="list-style-type: none"> • logging device-id context-name • logging device-id hostname • logging device-id ipaddress <p>Workaround: To overwrite the logging device-id based on the settings of the Setup Syslog for Autosync screen, enable the Overwrite ACE Logging Device ID function in the new Advanced Settings configuration screen (Admin > ANM Management > Advanced Settings). See "Configuring the Overwrite the ACE Logging device-id for the Syslog Option" section on page 5.</p>
CSCsv25150	VS: View HTTP/HTTPS probe missing some attribute values	<p>You may find that after you modify one or more fields for a server farm and create a new HTTP or HTTPS probe in a virtual server (Load Balancing > Virtual Servers), when you click View to display the probe attributes, several probe attributes are missing. The missing probe attribute includes the Port, Password, Request Method Type, and Request HTTP URL values. Workaround: View the HTTP or HTTPS probe attributes from the Health Monitoring screen rather than from the virtual server.</p>
CSCsx98370	RBAC: Add role with debug level permission returns null error	<p>This behavior may occur when the role includes the debug permission. Workaround: Do not specify Debug permission for an assigned user role. If necessary, specify Modify permission for the user role. Modify permission allows the user to change the persistent information associated with system objects.</p>

Table 1 Resolved Caveats in Software Version 2.1(1) (continued)

Bug ID	Summary	Explanation
CSCsx99945	RTSP: Probe header field should be replaced with Expect status field	When you create or edit an RTSP probe for a virtual server, in some instances, there is no Expect status field. The Probe Header field should be replaced with the Expect status field. Workaround: Access the Config > Load Balancing > Health Monitoring page, select the RTSP probe, and add the Expect Status.
CSCsy06259	Virtual Server field under Operations page of Rserver not showing values (when backup serverfarm is set)	In some instances, virtual server values on the Config > Operations > Real Servers page are empty. This occurs for a virtual server that contains a backup server farm.
CSCsy06642	ACE Activate/Suspend Rserver and Virtual server not reflecting immediately	The Admin State for ACE real and virtual servers may not update immediately on the Operations pages after you make operation changes. This behavior may occur only with small configurations.
CSCsy09765	On-demand polling shows polling incomplete message even when it is complete	In some cases, the on-demand polling request shows the pop-up message “On-demand polling request is still not completed. Exiting and showing the currently available data.”, even though the polling has been completed successfully. This behavior occurs when the on-demand polling operation takes longer than what ANM expects. Workaround: Click OK when the pop-up message appears. The updated data will be shown on the ANM GUI screen the next time that the page auto-refreshes.
CSCsy32815	ANM 2.1: CSS status not refreshed after operation on real server	If an ANM user has a domain that includes real servers but not the device on which the service is configured, the real server status is not refreshed after you perform a suspend or activation operation. This behavior is encountered with a Cisco CSS 11500 Series Content Services Switch. In this case, the domain does not include the CSS on which the service is configured.
CSCsy48343	Operations: CSM timeout if enable password is not set	You may encounter a CSM timeout if you do not have an enable password configured for the Catalyst 6500 series chassis. When the timeout occurs, you will receive a timeout message on the Operations page and you will then be unable to activate or suspend the CSM. Workaround: Specify a user who requires an enable password for the discovery of the Catalyst 6500 Series chassis into ANM.

Table 1 *Resolved Caveats in Software Version 2.1(1) (continued)*

Bug ID	Summary	Explanation
CSCsy54198	ANM 2.1 fails to sync VC for ACE	<p>You may encounter a synchronization problem when you attempt to manually synchronize a virtual context or when ANM tries to automatically synchronize (auto-sync) configuration changes performed out-of-band using the ACE CLI. Synchronization operation fails with a message “Error in rediscovering VC: Error in committing transaction.” When this behavior occurs, the virtual context CLI Sync Status column in the Virtual Context table (Config > Devices > Virtual Context Management) appears in the “Sync failed” state and all subsequent attempts to manually or automatically synchronize will result in the same state.</p> <p>Workaround for the ACE module:</p> <p>Perform synchronization operation at the ACE module level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Choose chassis from the All Devices table (Config > Devices > Device Management) and click the Modules button. 2. Choose the ACE module from the Modules table (Config > Devices > Device Management > Modules) and then click the CLI Sync button. <p>Workaround for the ACE appliance:</p> <p>Perform synchronization operation at the ACE appliance level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Choose ACE appliance from the All Devices table (Config > Devices > Device Management). 2. Click the CLI Sync button.

Table 1 Resolved Caveats in Software Version 2.1(1) (continued)

Bug ID	Summary	Explanation
CSCsy79949	ANM 2.1 does not display some SSL keys	<p>You may find that SSL key pairs for an ACE module or ACE appliance are missing from the Keys table in ANM software version 2.1. Whenever an SSL key matches a certificate that is currently installed in the ANM, the key pair fails to appear in the Keys table in the ANM GUI.</p> <p>Workaround: Install the ANM 2.1(1) software patch (see Installing the ANM 2.1(x) Software, page 3).</p> <p>After you install the ANM 2.1(1) software patch, perform a manual CLI synchronization at the context level, ACE module level, or ACE appliance level to force the missing SSL keys to appear in the Keys table in ANM.</p> <p>Workaround at the context level:</p> <p>Perform synchronization at the context level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Depending on whether you require to synchronize an ACE module or ACE appliance, perform one of the following: <ul style="list-style-type: none"> – For an ACE module, choose the chassis from the All Devices table (Config > Devices > Device Management) and click the Modules button. – For an ACE appliance, choose it from the All Devices table (Config > Devices > Device Management). 2. Choose Config > Devices > All VC. The All Virtual Contexts table appears. Choose a virtual content from the All Virtual Contexts table. 3. Click the CLI Sync button. <p>Workaround for the ACE module:</p> <p>Perform synchronization operation at the ACE module level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Choose chassis from the All Devices table (Config > Devices > Device Management) and click the Modules button. 2. Choose the ACE module from the Modules table (Config > Devices > Device Management > Modules) and then click the CLI Sync button. <p>Workaround for the ACE appliance:</p> <p>Perform synchronization operation at the ACE appliance level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Choose the ACE appliance from the All Devices table (Config > Devices > Device Management). 2. Click the CLI Sync button.

Table 1 Resolved Caveats in Software Version 2.1(1) (continued)

Bug ID	Summary	Explanation
CSCsy90018	Deploy ACL on ACE cause “ip df allow” & “fragment chain” configuration	<p>When you add or edit an ACL, and the ACL is associated with one or more VLAN interfaces, ANM generates “ip df allow” and “fragment chain 112” on the VLAN interfaces. “ip df allow” is the default on ACE. However, the “fragment chain” default value “112” ANM current set is different than the default value “24” on the ACE. This behavior can occur when the Max. Fragment Chains Allowed and Action For DF Bit parameters on the ANM VLAN Interfaces are with default values, and the VLAN interfaces have not been edited after the context has been imported and synchronized to the ANM.</p> <p>With the fix for this bug, ANM releases starting with software version 2.1(1) will no longer set “112” as the default value for “fragment chain”. However, ANM will not change the value from “112” to “24” if that value has been configured for VLAN interfaces in an earlier ANM release.</p> <p>To make the change, do the following:</p> <ol style="list-style-type: none"> 1. Access Config > Devices > Network > VLAN Interfaces. 2. Edit the Max. Fragment Chains Allowed field for the VLAN interfaces.
CSCsy90541	When Add/Edit ACL ANM/DM reset the Fragment Timeout for all the VLANs	<p>If you perform one of the following actions:</p> <ul style="list-style-type: none"> • Create one or more VLANs from ANM and you use a nondefault Reassembly Timeout value and then synchronize the context. • Create one or more VLANs through the ACE CLI with a Reassembly Timeout value, and then import this configuration to the ANM. <p>When you access the Security > ACLs screen to create or edit an ACL, and then assign that ACL to one or multiple VLANs, the ANM generates “no fragment timeout” commands for all VLANs that contain the specified Reassembly Timeout values in the context.</p>
CSCsy96097	Allow option to disable write mem for Config > Operations on CSM/CSS/ACE	<p>Operational pages perform a write memory action after changing the server states. This write memory action may result in a connection timeout with very large configuration files.</p> <p>Workaround: You can instruct ANM to enable or disable write memory on a Config > Operations configuration by using the settings in the new Advanced Settings configuration screen (Admin > ANM Management > Advanced Settings). See “Configuring the Enable Write Mem on the Config > Operations Option” section on page 6.</p>

Table 1 *Resolved Caveats in Software Version 2.1(1) (continued)*

Bug ID	Summary	Explanation
CSCsy98121	Parsing a “?” in ANM for a url redirection	<p>For example, if the following redirection statement within ANM is configured:</p> <p style="text-align: center;">https://xxx?refId=CONNECT</p> <p>ANM pushes only the following statement to the CLI:</p> <p style="text-align: center;">"https://xxx"</p> <p>The remaining information, starting with the “?” character, would be removed from the statement.</p>
CSCsy98797	Operational changes for Redundant CSM fail	<p>An exception can occur when you perform activate and suspend operations for a CSM. This behavior typically occurs when CSM modules are set as redundant in the ANM. Workaround: Do not set the redundancy in ANM. This workaround requires that the real and virtual servers on both high availability peers to be specifically selected in order to keep the configurations in synchronization.</p>
CSCsy98856	Edit ACL where ACE's have src/dest object group cause delete/re-add of ACE	<p>From the Config > Devices > Security > ACLs screen, if you add an ACL entry to an Extended ACL which has one or more ACL entries where the source IP address, destination IP address, or both addresses are configured with a Network Object Group, the ANM removes those entries configured with the Network Object Group and then adds them back. This behavior occurs typically after a device import or when any CLI synchronization (auto or manual) operation has occurred on the context.</p>
CSCsy98915	The ACL display for an ACE in ANM is incomplete in expanded view	<p>From the Devices > Security > ACLs main page, for some ACL entries, the Network Object Group name is not displayed in the Destination column although the destination network object group is configured. This behavior can occur when an ACL entry has both a source network address and a destination network address configured with Network Object Groups, and the Destination Network Object has a longer name than the Source Network Object Group.</p>

Software Version 2.1(1) Open Caveats

Table 2 lists the open caveats that apply to ANM software version 2.1(1).

Table 2 Open Caveats in Software Version 2.1(1)

Bug ID	Summary	Explanation and Workarounds
CSCsr75526 (device bug: CSCsu51832)	Config: Cannot edit Expect Status code for health probe.	<p>In the ACE HA Management section of the ANM HA Setup page, the peer ACE name is missing even though the HA has been setup properly and both ACE devices are already imported into ANM.</p> <p>The problem only happens when the two HA peers are not completely compatible. For example, two ACE appliances each running a different software version.</p> <p>Workaround: On the ACE context listing page, try to customize the column display by adding “ACE HA Peer” to the listing (click on Configure by moving mouse over to a small button at upper right corner), and apply. The column “ACE HA Peer” shows the peer context name.</p>
CSCsu22694	Editing a Layer 4 Payload sticky configuration reports exceptions.	<p>When a Layer 4 Payload sticky configuration is edited within ANM, if the “response sticky” option is removed from that sticky configuration, then removing some other sticky options such as offset, length, or timeout, may report exceptions. This should not occur and as a result, when it does happen, ANM becomes out-of-sync with the CLI and you will need to do a manual sync to recover.</p> <p>Workaround: Synchronize the context in which this exception occurs so that ANM has the updated CLI from the device context, and then proceed with the edits.</p>
CSCsu46598 CSCsx51244 (device bug: CSCsu67729)	Modifying port for backup server adds new instances of the backup server.	<p>Each time you modify the port for the backup server under Server Farm, ANM creates a new instance of the backup server instead of updating the existing one. Furthermore, these instances do not show up in the Real Server table under the server farm. This causes ANM to go out of sync with the device configuration. In addition, if you delete the primary server from the server farm, the backup servers do not get deleted. This is caused by ACE known problem CSCsu67729.</p> <p>Workaround: Do a CLI Sync on the virtual context. Before editing the port for the backup server, delete the backup server under Server Farm.</p>
CSCsu51106	Real server and backup server port for server farm should have default value.	<p>The real server and backup server port fields under the server farm should be initialized with default values for the correct server farm type. Currently, only the primary real server port is initialized with a default value of 0. According to the CLI, the minimum is 1. In addition, if the server farm type is Redirect, both the primary and backup server ports must be 0.</p> <p>Workaround: None. However, Port 0 on ANM indicates that the real server is configured to take “any” port, and ANM will not send data port 0 while generating the CLI.</p>

Table 2 *Open Caveats in Software Version 2.1(1) (continued)*

Bug ID	Summary	Explanation and Workarounds
CSCsu76450	Action list name field allows special characters.	The Action list name field on the ACE allows special characters, for example, “(!!, @@@)” but ANM does not allow them. If special characters have been used in the CLI, ANM will discover them, but you cannot create them within ANM. Workaround: Do not use the special characters in the Action list name.
CSCsu85936	UI does not refresh to display new class map from reference table.	When you do the following: add a Virtual Server with HTTP as its protocol, select L7 Load Balancing, add a new rule with the match condition type “class-map”, click on the “+” icon to add a new class map, and click the Close button in the Class Map window, the virtual server screen does not refresh to display the new class map. Workaround: Exit out of the Edit screen and return.
CSCsv40484	Restore: Restoring data on ANM 2.0 shows operations state column as blank.	The CSM and CSS Polling is not automatically restarting after an ANM stop/start. This happens after ANM Restart. Workaround: Sync from CLI for each device which is not polling.
CSCsv40714	CSS/CSM: operations state column of VIP on CSS and CSM should be N/A.	The CSS and CSM Virtual Server Operational state should appear as “N/A” because this column does not apply for these devices. Instead it is empty. This happens each time. Workaround: None.
CSCsv40734	Message should be refined so that it does not look like an exception.	Errors on the Operations pages have the string “Exception” even when errors from the device are being presented to the user. This might give the user the impression that the issue is more severe than it is. This occurs whenever an error occurs. For example, when a device is unreachable, or active CSS Content Rules is being activated. Workaround: None.
CSCsv43603	ANM cannot import GSS if a user with a different password is in the GSS GUI and the GSS CLI.	ANM will not be able to import a GSS if a GSS user configured with different password is in both the GSS GUI and the GSS CLI. Workaround: The GSS user should be configured with the same password in both the GSS GUI and GSS CLI.
CSCsv99351	If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly.	If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly and throws an exception. Workaround: Change mount point to ensure that there are no spaces in it. Note that this may not be possible in all circumstances, but should be possible if the machine is being used as a dedicated ANM server as it is supposed to be used.
CSCsx61268	Netmask field of Stickiness page is showing wrong values.	Netmask field of Stickiness page is showing values of cookie name or sticky type or header name for sticky types where this netmask field is not applicable.

Software Version ANM 2.1 Resolved Caveats and Open Caveats

The following sections contain the resolved and open caveats in ANM software version 2.1:

- [Software Version 2.1 Resolved Caveats](#)
- [Software Version 2.1 Open Caveats](#)

Software Version 2.1 Resolved Caveats

Table 3 lists the resolved caveats that apply to ANM software version 2.1.

Table 3 Resolved Caveats in Software Version 2.1

Bug ID	Summary	Explanation
CSCsr69490	ANM is unable to send configurations or perform monitoring on the device, and reports incorrect credentials error. The password on the ACE has likely been changed directly from the ACE CLI.	<p>After importing the ACE successfully in ANM, if the username or password on the ACE is changed, the credentials provided to ANM are no longer valid and ANM cannot continue to either sync, deploy, or monitor that ACE device.</p> <p>If the password change is performed on the ACE using ANM, then the ANM credential repository is updated. However, if it is performed directly on the ACE from the CLI, then ANM will not know about the changed credentials.</p> <p>Workaround: Perform one of the following workarounds depending on whether you are managing an ACE module or an ACE appliance:</p> <ul style="list-style-type: none"> • ACE module—Choose Devices > Modules > Do not Manage and then re-import the ACE module using the new/updated credentials. • ACE appliance—Delete the ACE appliance and re-import.
CSCsv04557	Unable to delete an RBAC user if the name has a space.	When you enter the name of a user, device, building block, or global resource class with a space present, the UI will issue a warning, but will not block the creation of the object if the creator ignores the warning.
CSCsv24649	SSH session leak on ACE, triggered by SSL cert/key operations on ANM.	The following error message appears when you attempt to import a certificate/key: “Please enable SSH for ACE.” This behavior can occur when SSH is currently enabled on the ACE and all the SSH sessions are in use. When this occurs, the ANM is unable to make a new SSH session. Workaround: Enter the clear ssh session-id CLI command on the ACE to manually clear the SSH sessions on the ACE. To obtain a listing of current session Ids, enter the show ssh session-info CLI command.
CSCsv39249	ACL: Not able to select Object Groups for the first ACL of a VC.	If no ACL exists on a context, when you try to add a new “extended” ACL, both Network and Service Object Groups are not displayed under the drop down menu although they are available and can be found under Object Groups.

Table 3 *Resolved Caveats in Software Version 2.1 (continued)*

Bug ID	Summary	Explanation
CSCsv82355	Read only users can enable and disable auto-sync.	When an ANM user is configured with the role of Network-Monitor, they should have read-only access. However, under the Admin tab, they are able to enable or disable auto-synchronization.
CSCsv95867	Enable polling does not work for GSS devices.	Once you disable background polling for a selected GSS device from Monitor > Devices > Polling Settings, and then enable it, the background polling does not re-start. When this behavior occurs, the GSS polling status displayed in Config > Devices will read "Not Polled." If you double-click the status hyperlink, you will receive a popup that reads "Unsupported command:restart_monitoring".
CSCsv97519	RBAC: User with view only role is allowed to create and import keys.	In some instances a user with a view-only role is allowed by the ANM to create and import keys from the SSL setup sequence.
CSCsv97608	RBAC: User with view role (predefined or custom) can add and edit an ACL.	Any user with view role (predefined or custom) can add or edit an ACL (Config >Device >Security >ACLs). Only a user with the appropriate permission should only be able to perform this action.
CSCsw25612	Creation of CSR Parameter options with spaces fails on SSL Setup page.	An error may be reported while creating a CSR parameter during the process of creating a Certificate signing request from the SSL setup pages. This behavior can occur when you use a space or period (.) character in the Locality or Organization unit field while creating CSR parameter from the SSL setup screen page. Workaround: Do not use the space or period characters in the Locality or Organization fields. Alternatively, if you need to, you can create this CSR parameter from the other CSR Parameters screen (SSL >CSR Parameters) on the ANM.
CSCsw29153	Missing audit log when adding match condition after Class Map is imported.	This behavior can occur after you create a class map and you specify a CLI Sync to the virtual context before you specify a match condition in that class map. In this case, ANM will not capture this configuration change. The same issue may occur if the class map exists in the virtual context before the virtual context has been imported to ANM.
CSCsw32781	ANM is reporting Catalyst 6500 interfaces are in State Unknown.	All interfaces from a Catalyst 6500 Service Module that you import to the ANM are reported as having a state of "Unknown" when you view the device interface summary (Config > Devices > Interfaces > Summary).
CSCsw39497	Cipher Name & Priority not deployed from SSL Setup Sequence in IE6 & IE7.	The cipher name and cipher priority are not properly deployed from the SSL Setup sequence when the process has been deployed from Internet Explorer 6 or 7. This behavior does not occur if you use either the Firefox version 2.0 or Netscape version 9.0 browsers.
CSCsw72486	ANM is unable to recognize wsp port causing a sync failure.	ANM is not able to properly synchronize the configuration or import an ACE context. The process fails with the following error message: "Error in loading config data from persistent store."

Table 3 Resolved Caveats in Software Version 2.1 (continued)

Bug ID	Summary	Explanation
CSCsx12999	Ondemand polling returns incorrect result when there are multiple Catalyst 6500 devices.	When more than one Catalyst 6500 Module is imported, Interfaces State sometimes displays Unknown for the second and subsequently imported Catalyst 6500 Modules.
CSCsx19521	Adding GSS requires ANM_CD license in ANM.	When trying to add a GSS to ANM, you may encounter an error message stating that the ANM_CD license is required. This behavior should not occur because the GSS should only require the server base license: "Operations support for the GSS is included within the base ANM server software license."
CSCsx20944	MySQL extremely slow on upgrade and restore for some schema.	On certain large databases, MySQL can appear to become unresponsive for a length duration (sometimes greater than 10 minutes) when you perform an upgrade or a restore. During this time, CPU utilization is at 100%. In some case, high availability is also affected.
CSCsx26993	ANM caches username and password for device import until ANM is restarted.	Sometimes, when importing a device into ANM, ANM caches the username and password pair used for the last successful import of a device. ANM will then use those credentials until it is restarted.
CSCsx30045	Objects with spaces in the name get a UI warning, but deploy anyway. They cannot be deleted or utilized.	After upgrading to 2.1, objects (devices) that appear to have a space in their name should be deleted and re-added with a name that does not include a space to avoid further problems.
CSCsx30120	Domain filtering on the Virtual Server monitoring page is not working.	Domain filtering on the Virtual Server monitoring page is showing up as an empty table. However, the page does properly appear (as it should).
CSCsx57078	Virtual server SIP inspection action GUI is missing inline match value.	In some instance, you are unable to add a SIP protocol inspection action on an inline match condition under virtual server.
CSCsx57314	ANM installation should automatically open up ports for syslogs.	If syslog messages are not received by ANM, then the problem could be due to Red Hat firewall blocking the syslog port. This problem is normally encountered due to the Redhat firewall being in effect; however, any IP tables rule that blocks incoming PDUs on the syslog port will cause it.
CSCsx68286	Cannot enable Compression Method for ACE Appliance in VS.	In some instances, ANM prevents you from enabling HTTP compression for an ACE appliance in a virtual server.
CSCsx70515	Unable to remove interface description on Catalyst 6500.	ANM is unable to remove the interface description on a Catalyst 6500 Service Module.
CSCsx78325	ANM 2.0 documentation does not mention requirements of physical interfaces usage.	To have the high availability function in ANM to function properly, you must have the primary IP set on the eth0 interface and the heartbeat IP set on eth1. This process is not reported in the <i>Installation Guide for ANM 2.0</i> .

Table 3 *Resolved Caveats in Software Version 2.1 (continued)*

Bug ID	Summary	Explanation
CSCsx80324	Cannot reset to local Auth if AAA is misconfigured.	ANM prevents a user for logging in because authentication always fails. The ANM reset password mechanism is unable to resolve the problem by resetting the admin password. This behavior occurs because the ANM Default organization is configured to authenticate user by using an external AAA server, but ANM cannot reach the external AAA server. As the result, no user can login, not even the admin. The current ANM reset password mechanism is only for resetting admin password with local authentication, not working for external authentication.
CSCsx80327	You should be able to activate and suspend regardless of the sync state.	Activating and suspending ACE real servers or virtual servers should not require a CLI synchronization.
CSCsx80331	CSS services do not show up in the list for a user even though they are selected for the domain to which the user belongs. Conditions: RBAC is being used.	Any domains directly containing CSS Services must be edited in ANM 2.1 in order for the domain keys to generate properly.
CSCsx94068	ACL: Resequence process display unwanted error message.	While performing a resequence of an existing ACL through the ANM GUI, the following error message appears: "The mandatory column is not set." This behavior can occur when the ACL type is Extended, and it has at least one ACL entry with a Protocol, Source Network or Destination that references an object group.

Software Version 2.1 Open Caveats

Table 4 describes the open caveats in ANM software version 2.1.

Table 4 Open Caveats in Software Version 2.1

Bug ID	Summary	Explanation and Workarounds
CSCsr75526 (device bug: CSCsu51832)	Config: Cannot edit Expect Status code for health probe.	<p>In the ACE HA Management section of the ANM HA Setup page, the peer ACE name is missing even though the HA has been setup properly and both ACE devices are already imported into ANM.</p> <p>The problem only happens when the two HA peers are not completely compatible. For example, two ACE appliances each running a different software version.</p> <p>Workaround: On the ACE context listing page, try to customize the column display by adding “ACE HA Peer” to the listing (click on Configure by moving mouse over to a small button at upper right corner), and apply. The column “ACE HA Peer” shows the peer context name.</p>
CSCsu22694	Editing a Layer 4 Payload sticky configuration reports exceptions.	<p>When a Layer 4 Payload sticky configuration is edited within ANM, if the “response sticky” option is removed from that sticky configuration, then removing some other sticky options such as offset, length, or timeout, may report exceptions. This should not occur and as a result, when it does happen, ANM becomes out-of-sync with the CLI and you will need to do a manual sync to recover.</p> <p>Workaround: Synchronize the context in which this exception occurs so that ANM has the updated CLI from the device context, and then proceed with the edits.</p>
CSCsu46598 CSCsx51244 (device bug: CSCsu67729)	Modifying port for backup server adds new instances of the backup server.	<p>Each time you modify the port for the backup server under Server Farm, ANM creates a new instance of the backup server instead of updating the existing one. Furthermore, these instances do not show up in the Real Server table under the server farm. This causes ANM to go out of sync with the device configuration. In addition, if you delete the primary server from the server farm, the backup servers do not get deleted. This is caused by ACE known problem CSCsu67729.</p> <p>Workaround: Do a CLI Sync on the virtual context. Before editing the port for the backup server, delete the backup server under Server Farm.</p>
CSCsu51106	Real server and backup server port for server farm should have default value.	<p>The real server and backup server port fields under the server farm should be initialized with default values for the correct server farm type. Currently, only the primary real server port is initialized with a default value of 0. According to the CLI, the minimum is 1. In addition, if the server farm type is Redirect, both the primary and backup server ports must be 0.</p> <p>Workaround: None. However, Port 0 on ANM indicates that the real server is configured to take “any” port, and ANM will not send data port 0 while generating the CLI.</p>

Table 4 Open Caveats in Software Version 2.1 (continued)

Bug ID	Summary	Explanation and Workarounds
CSCsu76450	Action list name field allows special characters.	<p>The Action list name field on the ACE allows special characters, for example, “(!!, @@@)” but ANM does not allow them. If special characters have been used in the CLI, ANM will discover them, but you cannot create them within ANM.</p> <p>Workaround: Do not use the special characters in the Action list name.</p>
CSCsu85936	UI does not refresh to display new class map from reference table.	<p>When you do the following: add a Virtual Server with HTTP as its protocol, select L7 Load Balancing, add a new rule with the match condition type “class-map”, click on the “+” icon to add a new class map, and click the Close button in the Class Map window, the virtual server screen does not refresh to display the new class map.</p> <p>Workaround: Exit out of the Edit screen and return.</p>
CSCsv25150	VS: View HTTP/HTTPS probe missing some attribute values	<p>You may find that after you modify one or more fields for a server farm and create a new HTTP or HTTPS probe in a virtual server (Load Balancing > Virtual Servers), when you click View to display the probe attributes, several probe attributes are missing. The missing probe attribute include the Port, Password, Request Method Type, and Request HTTP URL values. Workaround: View the HTTP or HTTPS probe attributes from the Health Monitoring screen rather than from the virtual server.</p>
CSCsv40484	Restore: Restoring data on ANM 2.0 shows operations state column as blank.	<p>The CSM and CSS Polling is not automatically restarting after an ANM stop/start. This happens after ANM Restart.</p> <p>Workaround: Sync from CLI for each device which is not polling.</p>
CSCsv40714	CSS/CSM: operations state column of VIP on CSS and CSM should be N/A.	<p>The CSS and CSM Virtual Server Operational state should appear as “N/A” because this column does not apply for these devices. Instead it is empty. This happens each time. Workaround: None.</p>
CSCsv40734	Message should be refined so that it does not look like an exception.	<p>Errors on the Operations pages have the string “Exception” even when errors from the device are being presented to the user. This might give the user the impression that the issue is more severe than it is. This occurs whenever an error occurs. For example, when a device is unreachable, or active CSS Content Rules is being activated. Workaround: None.</p>
CSCsv43603	ANM cannot import GSS if a user with a different password is in the GSS GUI and the GSS CLI.	<p>ANM will not be able to import a GSS if a GSS user configured with different password is in both the GSS GUI and the GSS CLI.</p> <p>Workaround: The GSS user should be configured with the same password in both the GSS GUI and GSS CLI.</p>
CSCsv99351	If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly.	<p>If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly and throws an exception.</p> <p>Workaround: Change mount point to ensure that there are no spaces in it. Note that this may not be possible in all circumstances, but should be possible if the machine is being used as a dedicated ANM server as it is supposed to be used.</p>

Table 4 Open Caveats in Software Version 2.1 (continued)

Bug ID	Summary	Explanation and Workarounds
CSCsx61268	Netmask field of Stickiness page is showing wrong values.	Netmask field of Stickiness page is showing values of cookie name or sticky type or header name for sticky types where this netmask field is not applicable.
CSCsx98370	RBAC: Add role with debug level permission returns null error	This behavior may occur when the role includes the debug permission. Workaround: Do not specify Debug permission for an assigned user role. If necessary, specify Modify permission for the user role. Modify permission allows the user to change the persistent information associated with system objects. Workaround: Do not use debug permission. Use modify in place of debug.
CSCsx99945	RTSP: Probe header field should be replaced with Expect status field	When you create or edit an RTSP probe for a virtual server, there is no Expect status field. The Probe Header field should be replaced with the Expect status field. Workaround: Access the Config > Load Balancing > Health Monitoring page, select the RTSP probe, and add the Expect Status.
CSCsy09765	On-demand polling shows polling incomplete message even when it is complete	In some cases, the on-demand polling request shows the pop-up message "On-demand polling request is still not completed. Exiting and showing the currently available data.", even though the polling has been completed successfully. This behavior occurs when the on-demand polling operation takes longer than what ANM expects. Workaround: Click OK when the pop-up message appears. The updated data will be shown on the ANM GUI screen the next time that the page auto-refreshes.
CSCsy32815	ANM 2.1 : CSS status not refreshed after operation on real server	If an ANM user has a domain that includes real servers but not the device on which the service is configured, the real server status is not refreshed after you perform suspend or activation operation. This behavior is encountered with a Cisco CSS 11500 Series Content Services Switch. In this case, the domain does not include the CSS on which the service is configured. Workaround: Wait for the pulling interval (by the default of five minutes) to refresh the real server status
CSCsy48343	Operations: CSM timeout if enable password is not set	You may encounter a CSM timeout if you do not have an enable password configured for the Catalyst 6500 series chassis. When the timeout occurs, you will receive a timeout message on the Operations page and you will then be unable to activate or suspend the CSM. Workaround: Specify a user who requires an enable password for the discovery of the Catalyst 6500 Series chassis into ANM.

Table 4 *Open Caveats in Software Version 2.1 (continued)*

Bug ID	Summary	Explanation and Workarounds
CSCsy54198	ANM 2.1 fails to sync VC for ACE.	<p>You may encounter this problem when you attempt to manually synchronize a virtual context or when ANM tries to automatically synchronize (auto-sync) configuration changes performed out-of-band using the ACE CLI. Synchronization operation fails with a message “Error in rediscovering VC: Error in committing transaction.” When this behavior occurs, the virtual context CLI Sync Status column in the Virtual Context table (Config > Devices > Virtual Context Management) appears in the “Sync failed” state and all subsequent attempts to manually or automatically synchronize will result in the same state.</p> <p>Workaround for the ACE module:</p> <p>Perform synchronization operation at the ACE module level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Select chassis from the All Devices table (Config > Devices > Device Management) and click the Modules button. 2. Select the ACE module from the Modules table (Config > Devices > Device Management > Modules) and then click the CLI Sync button. <p>Workaround for the ACE appliance:</p> <p>Perform synchronization operation at the ACE appliance level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Select ACE appliance from the All Devices table (Config > Devices > Device Management). 2. Click the CLI Sync button.

Table 4 Open Caveats in Software Version 2.1 (continued)

Bug ID	Summary	Explanation and Workarounds
CSCsy79949	ANM 2.1 does not display some SSL keys	<p>You may find that SSL key pairs for an ACE module or ACE appliance are missing from the Keys table in ANM software version 2.1. Whenever an SSL key matches a certificate that is currently installed in the ANM, the key pair fails to appear in the Keys table in the ANM GUI.</p> <p>To force the missing SSL keys to appear in the Keys table in ANM, perform a manual CLI synchronization at the context level, ACE module level, or ACE appliance level.</p> <p>Performing a Manual CLI Synchronization at the Context level:</p> <p>Perform synchronization at the context level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Depending on whether you require to synchronize an ACE module or ACE appliance, perform one of the following: <ul style="list-style-type: none"> – For an ACE module, select the chassis from the All Devices table (Config > Devices > Device Management) and click the Modules button. – For an ACE appliance, select it from the All Devices table (Config > Devices > Device Management). 2. Select Config > Devices > All VC. The All Virtual Contexts table appears. Select a virtual content from the All Virtual Contexts table. 3. Click the CLI Sync button. <p>Performing a Manual CLI Synchronization for the ACE Module:</p> <p>Perform synchronization operation at the ACE module level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Select chassis from the All Devices table (Config > Devices > Device Management) and click the Modules button. 2. Select the ACE module from the Modules table (Config > Devices > Device Management > Modules) and then click the CLI Sync button. <p>Performing a Manual CLI Synchronization for the ACE Appliance:</p> <p>Perform synchronization operation at the ACE appliance level by performing the following steps:</p> <ol style="list-style-type: none"> 1. Select ACE appliance from the All Devices table (Config > Devices > Device Management). 2. Click the CLI Sync button.

Table 4 Open Caveats in Software Version 2.1 (continued)

Bug ID	Summary	Explanation and Workarounds
CSCsy90018	Deploy ACL on ACE cause “ip df allow” & “fragment chain” configuration	When you add or edit an ACL, and the ACL is associated with one or more VLAN interfaces, ANM generates “ip df allow” and “fragment chain 112” on the VLAN interfaces. “ip df allow” is the default on ACE. However, the “fragment chain” default value “112” ANM current set is different than the default value “24” on ACE. This behavior can occur when the Max. Fragment Chains Allowed and Action For DF Bit parameters on the ANM VLAN Interfaces are with default values, and the VLAN interfaces have not been edited after the context has been imported and synchronized to the ANM. Workaround: "ip df allow" is the default on ACE; however, you must access Config > Devices > Network > VLAN Interfaces to edit the "Max. Fragment Chains Allowed" field for the VLAN interfaces.
CSCsy98797	Operational changes for Redundant CSM fail	An exception can occur when you perform activate and suspend operations for a CSM. This behavior typically occurs when CSM modules are set as redundant in the ANM. Workaround: Do not set the redundancy in ANM. This workaround requires that the real and virtual servers on both high availability peers to be specifically selected in order to keep the configurations in synchronization.
CSCsy06259	Virtual Server field under Operations page of Rserver not showing values (when backup serverfarm is set)	In some instances, virtual server values on the Config > Operations > Real Servers page are empty. This occurs for a virtual server that contains a backup server farm. Workaround: None.
CSCsy06642	ACE Activate/Suspend Rserver and Virtual server not reflecting immediately	The Admin State for ACE real and virtual servers may not update immediately on the Operations pages after you make operation changes. This behavior may occur only with small configurations. Workaround: Use the Reload icon on the page. Note It may take multiple reloads to update the Admin state for ACE real and virtual servers.
CSCsy90541	When Add/Edit ACL ANM reset the Fragment Timeout for all the VLANs	If you perform one of the following actions: <ul style="list-style-type: none"> • Create one or more VLANs from ANM and you use a nondefault Reassembly Timeout value and then synchronize the context. • Create one or more VLANs through the ACE CLI with a Reassembly Timeout value, and then import this configuration to the ANM. When you access the Security > ACLs screen to create or edit an ACL, and then assign that ACL to one or multiple VLANs, the ANM generates "no fragment timeout" commands for all VLANs that contain the specified Reassembly Timeout values in the context. Workaround: Access the VLAN Interfaces screen and change the Reassembly Timeout back to original value for the VLANs.

Table 4 *Open Caveats in Software Version 2.1 (continued)*

Bug ID	Summary	Explanation and Workarounds
CSCsy98121	Parsing a "?" in ANM for a url redirection	<p>If the following redirection statement within ANM is configured: https://paymonthly.tescomobile.com/orderentry/Referral.do?refId=CONNECT</p> <p>ANM pushes to the CLI only the following statement: "https://paymonthly.tescomobile.com/orderentry/Referral.do"</p> <p>The remaining information as of the "?" character is removed from the statement. Workaround: None.</p>
CSCsy98856	Edit ACL where ACE's have src/dest object group cause delete/re-add of ACE	<p>From the Config > Devices > Security > ACLs screen, if you add an ACL entry to an Extended ACL which has one or more ACL entries where the source IP address, destination IP address, or both addresses are configured with a Network Object Group, the ANM removes those entries configured with Network Object Group and then adds them back. This behavior occurs typically after device import or when any CLI synchronization (auto or manual) operation has occurred on the context. Workaround: None.</p>
CSCsy98915	The ACL display for an ACE in ANM is incomplete in expanded view	<p>From the Devices > Security > ACLs main page, for some ACL entries the Network Object Group name is not displayed in the Destination column although the destination network object group is configured. This behavior can occur happens when an ACL entry has both a source network address and a destination network address configured with Network Object Groups, and the Destination Network Object has a longer name than the Source Network Object Group. Workaround: None.</p>

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